

~~PURIFIED THERMOSTABLE ENZYME~~Abstract of the Disclosure

A purified thermostable ~~enzyme~~ ^{nucleic acid polymerase} is obtained that has unique characteristics. Preferably the ~~enzyme~~ ^{nucleic acid polymerase DNA Polymerase} is isolated from the ~~Thermus~~ ^a 5 aquaticus species and has a molecular weight of about 86,000-95,000 daltons. The thermostable ~~enzyme~~ ^{nucleic acid polymerase} may be native or recombinant and may be used in a temperature-cycling chain reaction wherein at least one sequence with the aid of ^{nucleic acid polymerase} selected primers and nucleotide ¹⁰ triphosphates. The ~~enzyme~~ ^{nucleic acid polymerase} is preferably stored in a buffer containing non-ionic detergents that lends stability to the ~~enzyme~~ ^{nucleic acid polymerase}.